

AWS Cloud Financial Management for Builders

Course outline

Day 1

Module 0: Course Overview

- Course introduction

Module 1: Introduction to Cloud Financial Management

- Introduction to Cloud Financial Management
- Four pillars of Cloud Financial Management

Module 2: Resource Tagging

- Tagging resources
- Hands-On Lab: Cost optimization: Control Resource Consumption Using Tagging and AWS Config

Module 3: Pricing and Cost

- Fundamentals of pricing
- AWS Free Tier
- Volume discounts
- Savings plans and Reserved Instances
- Demonstration: AWS Pricing Calculator

Module 4: AWS Billing, Reporting, and Monitoring

- Understanding AWS invoices
- Reporting and planning
- AWS Cost Explorer
- AWS Budgets
- Demonstration: AWS Billing Console

- Demonstration: AWS Cost Explorer
- Demonstration: Trusted Advisor
- Hands-On Lab: Cost optimization: Deploy Ephemeral Environments Using Amazon EC2 Auto Scaling

Day 2

Module 5: Architecting for Cost: Compute

- Evolution of compute efficiency
- Amazon EC2 right-sizing
- Purchasing options
- Architect for Amazon EC2 Spot Instance
- Impact of software licensing
- Demonstration: Compute Optimizer
- Demonstration: Spot Instance Advisor
- Hands-On Lab: Cost optimization: Right Size Amazon EC2 Instances Using Amazon CloudWatch Metrics

Module 6: Architecting for Cost: Networking

- Data transfer costs
- Understand data costs for different services
- How to triage network costs
- Hands-On Lab: Cost optimization: Reduce Data Transfer Costs Using Amazon CloudFront and Endpoints

Day 3

Module 7: Architecting for Cost: Storage

- Amazon EBS cost, pricing, and best practices
- Amazon S3 cost, pricing, and best practices
- Amazon EFS cost, pricing, and best practices
- Hands-On Lab: Cost optimization: Reduce Storage Costs Using Amazon S3 Lifecycle Management

Module 8: Architecting for Cost: Databases

- Amazon RDS cost, pricing, and best practices
- Amazon Aurora cost, pricing, and best practices
- Amazon DynamoDB cost, pricing, and best practices
- Amazon ElastiCache cost, pricing, and best practices
- Amazon Redshift cost, pricing, and best practices

Module 9: Cost Governance

- Setting up AWS Organizations
- AWS Systems Manager

Module 10: Course Summary

- Course review
- Hands-On Lab: Cost optimization: Reduce Compute Costs Using AWS Instance Scheduler